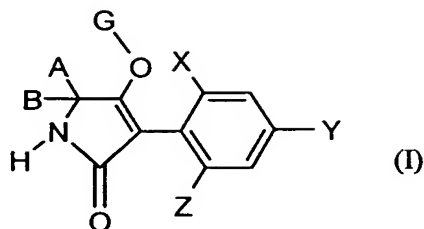


**Patent claims**

1. Compounds of the formula (I)



5 in which

X represents halogen,

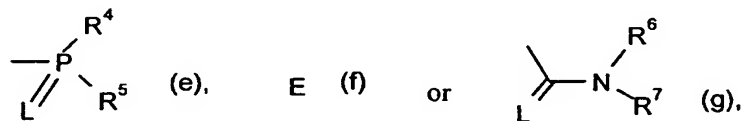
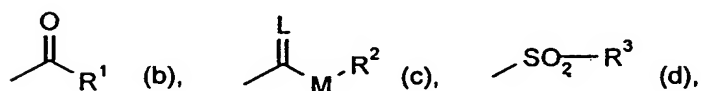
Y represents alkyl and

Z represents C<sub>2</sub>-C<sub>6</sub>-alkyl,

10 A and B together with the carbon atom to which they are attached represent a saturated or unsaturated C<sub>3</sub>-C<sub>8</sub>-ring which optionally contains at least one heteroatom and which is optionally substituted by alkoxy or haloalkyl,

and

G represents hydrogen (a) or represents one of the groups



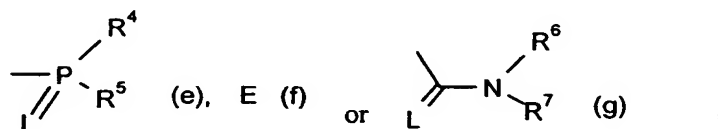
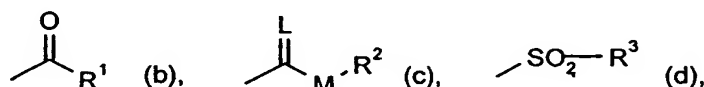
15 in which

E represents a metal ion equivalent or an ammonium ion,

L represents oxygen or sulphur,

M represents oxygen or sulphur,

- $R^1$  represents in each case optionally substituted alkyl, alkenyl, alkoxyalkyl, alkylthio-alkyl or polyalkoxyalkyl or represents in each case optionally halogen-, alkyl- or alkoxy-substituted cycloalkyl or heterocyclyl or represents in each case optionally substituted phenyl, phenylalkyl, phenylalkenyl or hetaryl,
- 5  $R^2$  represents in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl or polyalkoxyalkyl or represents in each case optionally substituted cycloalkyl, phenyl or benzyl,
- $R^3$ ,  $R^4$  and  $R^5$  independently of one another represent in each case optionally halogen-substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio or  
10 cycloalkylthio or represent in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio,
- $R^6$  and  $R^7$  independently of one another represent hydrogen, represent in each case optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, represent in each case optionally substituted phenyl or benzyl, or together with the N atom to which  
15 they are attached form an optionally substituted cycle which optionally contains oxygen or sulphur.
2. Compounds of the formula (I) according to Claim 1, in which
- X represents chlorine or bromine,
- Y represents  $C_1$ - $C_3$ -alkyl,
- 20 Z represents ethyl, n-propyl or n-butyl,
- A, B and the carbon atom to which they are attached represent saturated  $C_3$ - $C_8$ -cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur and which is optionally substituted by  $C_1$ - $C_4$ -haloalkyl or  $C_1$ - $C_6$ -alkoxy,
- G represents hydrogen (a) or represents one of the groups



in which

E represents a metal ion equivalent or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

5             $R^1$  represents  $C_1$ - $C_{20}$ -alkyl,  $C_2$ - $C_{20}$ -alkenyl,  $C_1$ - $C_6$ -alkoxy- $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkylthio- $C_1$ - $C_6$ -alkyl or poly- $C_1$ - $C_4$ -alkoxy- $C_1$ - $C_4$ -alkyl, each of which is optionally mono- to heptasubstituted by halogen, mono- or disubstituted by cyano, monosubstituted by  $COR^{13}$ ,  $C=N-OR^{13}$ ,  $CO_2R^{13}$  or  $CON \begin{smallmatrix} R^{13} \\ R^{13} \end{smallmatrix}$ , or represents  $C_3$ - $C_8$ -cycloalkyl which is  
10            optionally mono- to trisubstituted by halogen,  $C_1$ - $C_4$ -alkyl or  $C_1$ - $C_4$ -alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen and/or sulphur,

             represents phenyl, phenyl- $C_1$ - $C_2$ -alkyl or phenyl- $C_1$ - $C_2$ -alkenyl, each of which is optionally mono- to trisubstituted by halogen, cyano, nitro,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -alkylsulphinyl or  
15             $C_1$ - $C_6$ -alkylsulphonyl,

             represents 5- or 6-membered hetaryl which is optionally mono- or disubstituted by halogen or  $C_1$ - $C_6$ -alkyl and which contains one or two heteroatoms from the group consisting of oxygen, sulphur and nitrogen,

20             $R^2$  represents  $C_1$ - $C_{20}$ -alkyl,  $C_2$ - $C_{20}$ -alkenyl,  $C_1$ - $C_6$ -alkoxy- $C_2$ - $C_6$ -alkyl or poly- $C_1$ - $C_6$ -alkoxy- $C_2$ - $C_6$ -alkyl, each of which is optionally mono- to trisubstituted by halogen,

             represents  $C_3$ - $C_8$ -cycloalkyl which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_6$ -alkyl or  $C_1$ - $C_6$ -alkoxy or

25            represents phenyl or benzyl, each of which is optionally mono- to trisubstituted by halogen, cyano, nitro,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkyl or  $C_1$ - $C_6$ -haloalkoxy,

$R^3$  represents  $C_1$ - $C_8$ -alkyl which is optionally mono- or polysubstituted by halogen or represents phenyl or benzyl, each of which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -haloalkoxy, cyano or nitro,

5  $R^4$  and  $R^5$  independently of one another represent  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -alkoxy,  $C_1$ - $C_8$ -alkyl-amino, di- $(C_1$ - $C_8$ -alkyl)amino,  $C_1$ - $C_8$ -alkylthio or  $C_2$ - $C_8$ -alkenylthio, each of which is optionally mono- to trisubstituted by halogen, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- to trisubstituted by halogen, nitro, cyano,  $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_4$ -haloalkoxy,  $C_1$ - $C_4$ -alkylthio,  $C_1$ - $C_4$ -haloalkylthio,  $C_1$ - $C_4$ -alkyl or  $C_1$ - $C_4$ -haloalkyl,

10  $R^6$  and  $R^7$  independently of one another represent hydrogen, represent  $C_1$ - $C_8$ -alkyl,  $C_3$ - $C_8$ -cycloalkyl,  $C_1$ - $C_8$ -alkoxy,  $C_3$ - $C_8$ -alkenyl or  $C_1$ - $C_8$ -alkoxy- $C_2$ - $C_8$ -alkyl, each of which is optionally mono- to trisubstituted by halogen, represent phenyl or benzyl, each of which is optionally mono- to trisubstituted by halogen,  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -haloalkyl or  $C_1$ - $C_8$ -alkoxy, or together represent a  $C_3$ - $C_6$ -alkylene radical which is optionally mono- or disubstituted by  $C_1$ - $C_4$ -alkyl and in which optionally one methylene group is replaced by oxygen or sulphur,

15  $R^{13}$  represents  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -alkenyl,  $C_3$ - $C_6$ -alkynyl or  $C_1$ - $C_4$ -alkoxy- $C_2$ - $C_4$ -alkyl, each of which is optionally mono- to trisubstituted by halogen, or represents  $C_3$ - $C_6$ -cycloalkyl which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_2$ -alkyl or  $C_1$ - $C_2$ -alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen, or represents phenyl or phenyl- $C_1$ - $C_2$ -alkyl, each of which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_4$ -alkyl, 20  $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_2$ -haloalkyl,  $C_1$ - $C_2$ -haloalkoxy, cyano or nitro

$R^{13}$  represents hydrogen,  $C_1$ - $C_6$ -alkyl or  $C_3$ - $C_6$ -alkenyl.

3. Compounds of the formula (I) according to Claim 1, in which

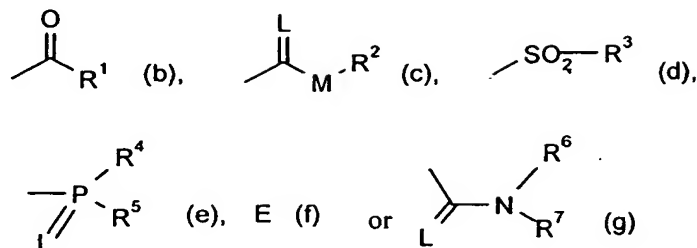
X represents chlorine or bromine,

Y represents methyl or ethyl,

25 Z represents ethyl or n-propyl,

A, B and the carbon atom to which they are attached represent saturated  $C_3$ - $C_7$ -cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally monosubstituted by  $C_1$ - $C_2$ -haloalkyl or  $C_1$ - $C_4$ -alkoxy,

G represents hydrogen (a) or represents one of the groups



in which

**E** represents a metal ion equivalent or an ammonium ion,

**L** represents oxygen or sulphur and

5                      M       represents oxygen or sulphur,

10 R<sup>1</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>2</sub>-alkyl or poly-C<sub>1</sub>-C<sub>3</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- to pentasubstituted by fluorine or chlorine, monosubstituted by cyano, monosubstituted by CO-R<sup>13</sup>, C=N-OR<sup>13</sup> or CO<sub>2</sub>R<sup>13</sup>, or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which is optionally mono- or disubstituted by fluorine, chlorine, C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen,

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-alkylsulphinyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl or C<sub>1</sub>-C<sub>2</sub>-haloalkoxy,

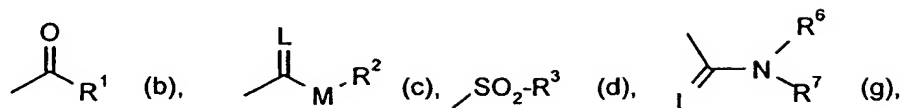
represents pyrazolyl, thiazolyl, pyridyl, pyrimidyl, furanyl or thienyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine or C<sub>1</sub>-C<sub>2</sub>-alkyl,

20 R<sup>2</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl or poly-C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine,

represents C<sub>3</sub>-C<sub>7</sub>-cycloalkyl which is optionally monosubstituted by C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy, or

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, methoxy, trifluoromethyl or trifluoromethoxy,

- $R^3$  represents  $C_1$ - $C_4$ -alkyl which is optionally mono- to trisubstituted by fluorine or chlorine or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,
- 5  $R^4$  and  $R^5$  independently of one another each represent  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylamino, di- $(C_1$ - $C_6$ -alkyl)amino,  $C_1$ - $C_6$ -alkylthio or  $C_3$ - $C_4$ -alkenylthio, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, nitro, cyano,  $C_1$ - $C_3$ -alkoxy, trifluoromethoxy,  $C_1$ - $C_3$ -alkylthio,  $C_1$ - $C_3$ -alkyl or trifluoromethyl,
- 10  $R^6$  and  $R^7$  independently of one another represent hydrogen, represent  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl,  $C_1$ - $C_4$ -alkoxy,  $C_3$ - $C_6$ -alkenyl or  $C_1$ - $C_6$ -alkoxy- $C_2$ - $C_6$ -alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, represent phenyl which is optionally mono- or disubstituted by fluorine, chlorine, bromine, trifluoromethyl,  $C_1$ - $C_4$ -alkyl or  $C_1$ - $C_4$ -alkoxy, or together represent a  $C_5$ - $C_6$ -alkylene radical which is optionally mono- or disubstituted by methyl and in which optionally one methylene group is replaced by oxygen,
- 15  $R^{13}$  represents  $C_1$ - $C_4$ -alkyl,  $C_3$ - $C_4$ -alkenyl,  $C_3$ - $C_4$ -alkynyl or  $C_1$ - $C_4$ -alkoxy- $C_2$ - $C_3$ -alkyl or  $C_3$ - $C_4$ -cycloalkyl in which optionally one methylene group is replaced by oxygen.
- 20 4. Compounds of the formula (I) according to Claim 1 in which
- $X$  represents chlorine or bromine,
- $Y$  represents methyl,
- $Z$  represents ethyl,
- 25 A, B and the carbon atom to which they are attached represent saturated  $C_6$ -cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally monosubstituted by trifluoromethyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy or isobutoxy,
- G represents hydrogen (a) or represents one of the groups



in which

L represents oxygen and

M represents oxygen or sulphur,

- 5       $R^1$  represents  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_1$ - $C_2$ -alkoxy- $C_1$ - $C_2$ -alkyl,  $C_1$ - $C_2$ -alkylthio- $C_1$ - $C_2$ -alkyl or poly- $C_1$ - $C_2$ -alkoxy- $C_1$ - $C_2$ -alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represents cyclopropyl, cyclopentyl or cyclohexyl, each of which is optionally monosubstituted by fluorine, chlorine, methyl, ethyl or methoxy,
- 10      represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, methylthio, ethylthio, methylsulphinyl, ethylsulphinyl, methylsulphonyl, ethylsulphonyl, trifluoromethyl or trifluoromethoxy,
- 15      represents furanyl, thienyl or pyridyl, each of which is optionally monosubstituted by chlorine, bromine or methyl,
- 20       $R^2$  represents  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_6$ -alkenyl or  $C_1$ - $C_3$ -alkoxy- $C_2$ - $C_3$ -alkyl, cyclopentyl or cyclohexyl,
- or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, methoxy, trifluoromethyl or trifluoromethoxy,
- 25       $R^3$  represents  $C_1$ - $C_4$ -alkyl which is optionally mono- to trisubstituted by fluorine or chlorine or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,
- $R^6$  represents hydrogen, represents  $C_1$ - $C_4$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl or allyl, represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, methyl, methoxy or trifluoromethyl,
- $R^7$  represents methyl, ethyl, n-propyl, isopropyl or allyl,

$R^6$  and  $R^7$  together represent a  $C_5$ - $C_6$ -alkylene radical in which optionally one methylene group is replaced by oxygen.

5. Compounds of the formula (I) according to Claim 1 in which

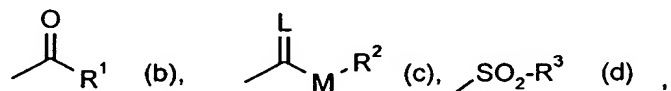
X represents chlorine or bromine,

5 Y represents methyl,

Z represents ethyl,

A, B and the carbon atom to which they are attached represent saturated  $C_6$ -cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally monosubstituted by methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy or isobutoxy,

10 G represents hydrogen (a) or represents one of the groups



in which

L represents oxygen and

M represents oxygen,

15  $R^1$  represents  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_2$ -alkoxy- $C_1$ - $C_2$ -alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represents cyclopropyl,

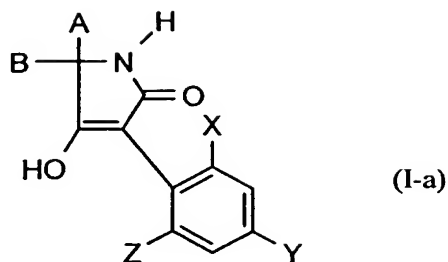
$R^2$  represents  $C_1$ - $C_8$ -alkyl or  $C_2$ - $C_6$ -alkenyl,

$R^3$  represents  $C_1$ - $C_4$ -alkyl.

20 6. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that, to obtain

(A) compounds of the formula (I-a),

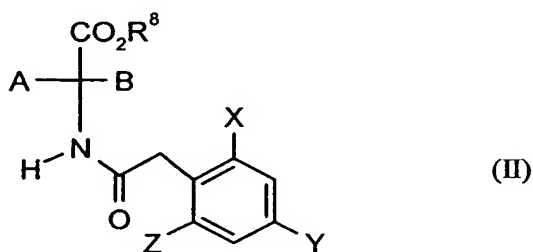




in which

A, B, X, Y and Z are as defined above,

compounds of the formula (II),



5

in which

A, B, X, Y and Z are as defined above

and

$R^8$  represents alkyl,

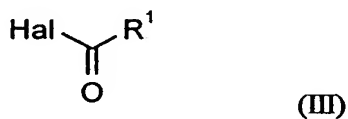
10

are condensed intramolecularly in the presence of a diluent and in the presence of a base,

(B) compounds of the formula (I-b) shown above in which A, B,  $R^1$ , X, Y and Z are as defined above, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are reacted

15

$\alpha$ ) with acid halides of the formula (III),



in which

$R^1$  is as defined above and

Hal represents halogen

or

β) with carboxylic anhydrides of the formula (IV),



in which

$R^1$  is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

10 (C) compounds of the formula (I-c) shown above in which A, B,  $R^2$ , M, X, Y and Z are as defined above and L represents oxygen, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

with chloroformic esters or chloroformic thioesters of the formula (V),



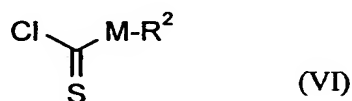
15 in which

$R^2$  and M are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

20 (D) compounds of the formula (I-c) shown above in which A, B,  $R^2$ , M, X, Y and Z are as defined above and L represents sulphur, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

α) with chloromonothioformic esters or chlorodithioformic esters of the formula (VI)



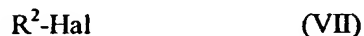
in which

M and R<sup>2</sup> are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder

or

- 5           β)       with carbon disulphide and then with compounds of the formula (VII)



in which

R<sup>2</sup> is as defined above and

Hal represents chlorine, bromine or iodine,

- 10                       if appropriate in the presence of a diluent and if appropriate in the presence of a base,

- (E)       compounds of the formula (I-d) shown above in which A, B, R<sup>3</sup>, X, Y and Z are as defined above, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

with sulphonyl chlorides of the formula (VIII)

- 15                               R<sup>3</sup>-SO<sub>2</sub>-Cl                       (VIII)

in which

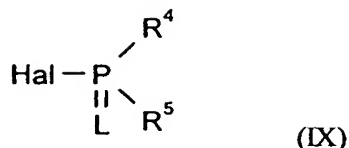
R<sup>3</sup> is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

- 20           (F)       compounds of the formula (I-e) shown above in which A, B, L, R<sup>4</sup>, R<sup>5</sup>, X, Y and Z are as defined above, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

with phosphorus compounds of the formula (IX)

- 134 -



in which

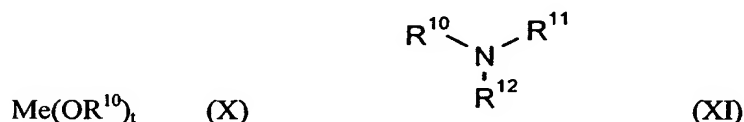
L, R<sup>4</sup> and R<sup>5</sup> are as defined above and

Hal represents halogen,

5 if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

(G) compounds of the formula (I-f) shown above in which A, B, E, X, Y and Z are as defined above, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

10 with metal compounds or amines of the formulae (X) and (XI), respectively,



in which

Me represents a mono- or divalent metal

t represents the number 1 or 2 and

15 R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> independently of one another represent hydrogen or alkyl,

if appropriate in the presence of a diluent,

(H) compounds of the formula (I-g) shown above in which A, B, L, R<sup>6</sup>, R<sup>7</sup>, X, Y and Z are as defined above, compounds of the formula (I-a) shown above in which A, B, X, Y and Z are as defined above are in each case reacted

20 α) with isocyanates or isothiocyanates of the formula (XII),

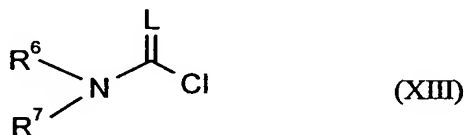


in which

$R^6$  and L are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of a catalyst, or

B) with carbamoyl chlorides or thiocarbamoyl chlorides of the formula (XIII)



5

in which

L,  $R^6$  and  $R^7$  are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder.

- 10 7. Use of compounds of the formula (I) according to Claim 1 for preparing pesticides and/or herbicides.
8. Pesticides and/or herbicides, characterized in that they comprise at least one compound of the formula (I) according to Claim 1.
9. Method for controlling animal pests and/or unwanted vegetation, characterized in that compounds of the formula (I) according to Claim 1 are allowed to act on pests and/or their habitat.
- 15 10. Use of compounds of the formula (I) according to Claim 1 for controlling animal pests and/or unwanted vegetation.
11. Process for preparing pesticides and/or herbicides, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.
- 20 12. Compositions, comprising an effective amount of a combination of active compound comprising
  - (a') at least one substituted cyclic ketoenol of the formula (I) according to Claim 1 in which A, B, G, X, Y and Z are as defined above

25

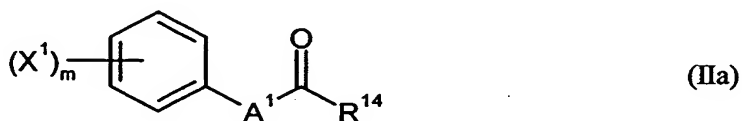
and

b') at least one crop plant compatibility-improving compound from the following group of compounds:

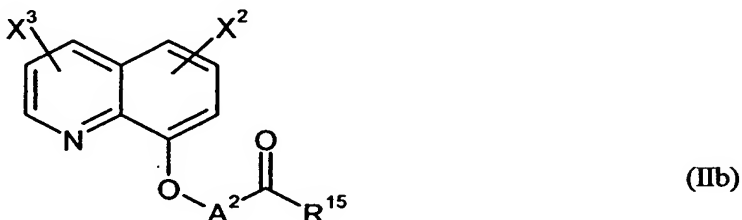
4-dichloroacetyl-1-oxa-4-azaspiro[4.5]decane (AD-67, MON-4660), 1-dichloroacetylhexahydro-3,3,8a-trimethylpyrrolo[1,2-a]pyrimidin-6(2H)-one  
 5 (dicyclonon, BAS-145138), 4-dichloroacetyl-3,4-dihydro-3-methyl-2H-1,4-benzoxazine (benoxacor), 1-methylhexyl 5-chloroquinoline-8-oxyacetate (cloquintocet-mexyl - cf. also related compounds in EP-A-86750, EP-A-94349, EP-A-191736, EP-A-492366), 3-(2-chlorobenzyl)-1-(1-methyl-1-phenylethyl)urea (cumyluron),  $\alpha$ -(cyanomethoximino)phenylacetoneitrile (cyometrinil),  
 10 2,4-dichlorophenoxyacetic acid (2,4-D), 4-(2,4-dichlorophenoxy)butyric acid (2,4-DB), 1-(1-methyl-1-phenylethyl)-3-(4-methylphenyl)urea (daimuron, dymron), 3,6-dichloro-2-methoxybenzoic acid (dicamba), S-1-methyl 1-phenylethyl piperidine-1-thiocarboxylate (dimepiperate), 2,2-dichloro-N-(2-oxo-2-(2-propenylamino)ethyl)-N-(2-propenyl)acetamide (DKA-24), 2,2-dichloro-N,N-di-2-propenylacetamide (dichlorimid), 4,6-dichloro-2-phenylpyrimidine (fenclorim), ethyl 1-(2,4-dichlorophenyl)-5-trichloromethyl-1H-1,2,4-triazole-3-carboxylate (fenchlorazole-ethyl - cf. also related compounds in EP-A-174562 and EP-A-346620), phenylmethyl 2-chloro-4-trifluoromethylthiazole-5-carboxylate (flurazole), 4-chloro-N-(1,3-dioxolan-2-ylmethoxy)- $\alpha$ -trifluoroacetophenone  
 20 oxime (fluxofenim), 3-dichloroacetyl-5-(2-furanyl)-2,2-dimethyloxazolidine (furilazole, MON-13900), ethyl 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylate (isoxadifen-ethyl - cf. also related compounds in WO-A-95/07897), 1-(ethoxycarbonyl)ethyl 3,6-dichloro-2-methoxybenzoate (lactidichlor), (4-chloro-o-tolyloxy)acetic acid (MCPA), 2-(4-chloro-o-tolyloxy)propionic acid (mecoprop),  
 25 diethyl 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylate (mefenpyr-diethyl - cf. also related compounds in WO-A-91/07874), 2-dichloromethyl-2-methyl-1,3-dioxolane (MG-191), 2-propenyl 1-oxa-4-azaspiro[4.5]decane-4-carbodithioate (MG-838), 1,8-naphthalic anhydride,  $\alpha$ -(1,3-dioxolan-2-ylmethoximino)phenylacetoneitrile (oxabetrinil), 2,2-dichloro-N-(1,3-dioxolan-2-ylmethyl)-N-(2-propenyl)acetamide (PPG-1292), 3-dichloroacetyl-2,2-dimethyloxazolidine (R-28725), 3-dichloroacetyl-2,2,5-trimethyloxazolidine (R-29148), 4-(4-chloro-o-tolyl)butyric acid, 4-(4-chlorophenoxy)butyric acid, diphenylmethoxyacetic acid, methyl diphenylmethoxyacetate, ethyl diphenylmethoxyacetate, methyl 1-(2-chlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate,  
 30 ethyl 1-(2,4-dichlorophenyl)-5-methyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-isopropyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-

dichlorophenyl)-5-(1,1-dimethylethyl)-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate (cf. also related compounds in EP-A-269806 and EP-A-333131), ethyl 5-(2,4-dichlorobenzyl)-2-isoxazoline-3-carboxylate, ethyl 5-phenyl-2-isoxazoline-3-carboxylate, ethyl 5-(4-fluorophenyl)-5-phenyl-2-isoxazoline-3-carboxylate (cf. also related compounds in WO-A-91/08202), 1,3-dimethylbut-1-yl 5-chloroquinoline-8-oxyacetate, 4-allyloxybutyl 5-chloroquinoline-8-oxyacetate, 1-allyloxyprop-2-yl 5-chloroquinoline-8-oxyacetate, methyl 5-chloroquinoxaline-8-oxyacetate, ethyl 5-chloroquinoline-8-oxyacetate, allyl 5-chloroquinoxaline-8-oxyacetate, 2-oxoprop-1-yl 5-chloroquinoline-8-oxyacetate, diethyl 5-chloroquinoline-8-oxymalonate, diallyl 5-chloroquinoxaline-8-oxymalonate, diethyl 5-chloroquinoline-8-oxymalonate (cf. also related compounds in EP-A-582198), 4-carboxychroman-4-ylacetic acid (AC-304415, cf. EP-A-613618), 4-chlorophenoxyacetic acid, 3,3'-dimethyl-4-methoxybenzophenone, 1-bromo-4-chloromethylsulphonylbenzene, 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3-methylurea (also known as N-(2-methoxybenzoyl)-4-[(methylaminocarbonyl)amino]benzenesulphonamide), 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3,3-dimethylurea, 1-[4-(N-4,5-dimethylbenzoylsulphamoyl)phenyl]-3-methylurea, 1-[4-(N-naphthylsulphamoyl)phenyl]-3,3-dimethylurea, N-(2-methoxy-5-methylbenzoyl)-4-(cyclopropylaminocarbonyl)benzenesulphonamide,

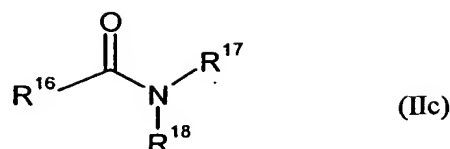
and/or one of the following compounds, defined by general formulae, of the general formula (IIa)



or of the general formula (IIb)



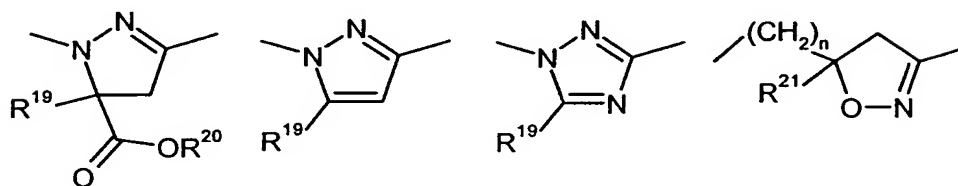
or of the formula (IIc)



where

m represents the number 0, 1, 2, 3, 4 or 5,

5 A<sup>1</sup> represents one of the divalent heterocyclic groupings shown below,



n represents the number 0, 1, 2, 3, 4 or 5,

A<sup>2</sup> represents optionally C<sub>1</sub>-C<sub>4</sub>-alkyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkoxy-carbonyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkenyloxy-carbonyl-substituted alkanediyl having 1 or 2 carbon atoms,

10 R<sup>14</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino,

R<sup>15</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>7</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy-C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino,

15 R<sup>16</sup> represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl,

R<sup>17</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl,

20

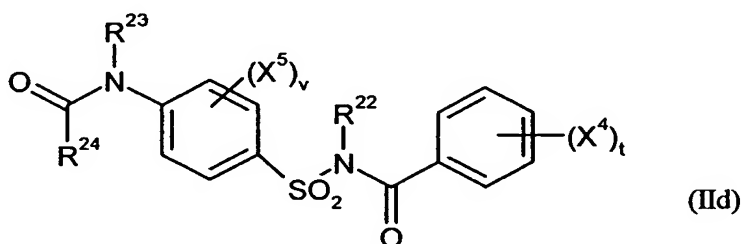
R<sup>18</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or



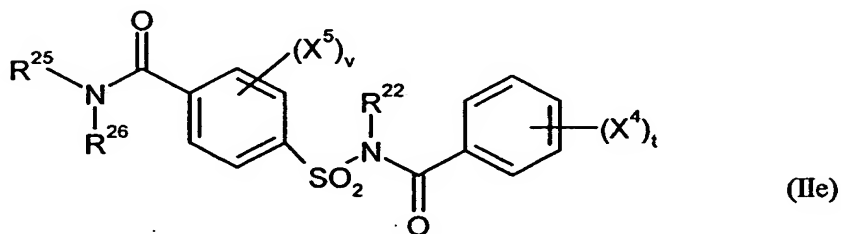
optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl, R<sup>17</sup> and R<sup>18</sup> also together optionally represent C<sub>3</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl, each of which is optionally substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, phenyl, furyl, a fused benzene ring or by two substituents which, together with the C atom to which they are attached, form a 5- or 6-membered carbocycle,

- R<sup>19</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,
- R<sup>20</sup> represents hydrogen, optionally hydroxyl-, cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or tri-(C<sub>1</sub>-C<sub>4</sub>-alkyl)silyl,
- R<sup>21</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,
- X<sup>1</sup> represents nitro, cyano, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,
- X<sup>2</sup> represents hydrogen, cyano, nitro, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,
- X<sup>3</sup> represents hydrogen, cyano, nitro, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy,

and/or the following compounds, defined by general formulae, of the general formula (II d)

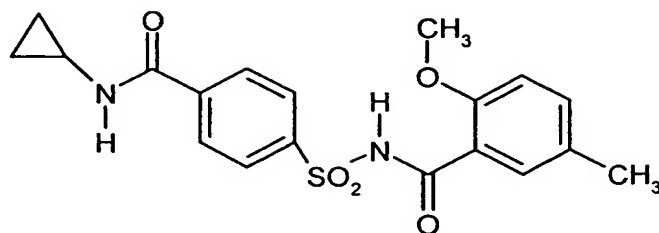


or of the general formula (II e)

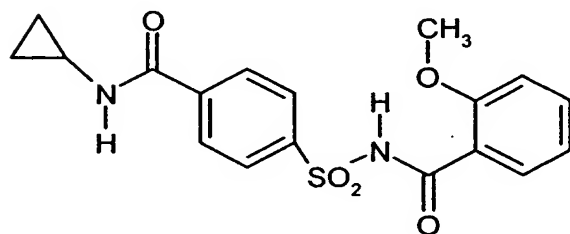


where

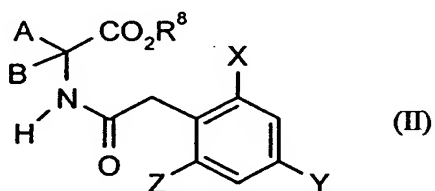
- t represents the number 0, 1, 2, 3, 4 or 5,
- v represents the number 0, 1, 2, 3, 4 or 5,
- R<sup>22</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,
- 5 R<sup>23</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,
- R<sup>24</sup> represents hydrogen, in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di-(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino, or in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyloxy, C<sub>3</sub>-C<sub>6</sub>-cycloalkylthio or C<sub>3</sub>-C<sub>6</sub>-cycloalkylamino,
- 10 R<sup>25</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, or optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl,
- 15 R<sup>26</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, or optionally nitro-, cyano-, halogen-, C<sub>1</sub>-C<sub>4</sub>-alkyl-, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy- or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy-substituted phenyl, or together with R<sup>25</sup>
- 20 represents in each case optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>2</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl,
- X<sup>4</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, and
- X<sup>5</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino,
- 25 halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.
13. Compositions according to Claim 12, where the crop plant compatibility-improving compound is selected from the following group of compounds:
- cloquintocet-mexyl, fenclorazole-ethyl, isoxadifen-ethyl, mefenpyr-diethyl, furilazole, fenclorim, cumyluron, dymron or the compounds



and



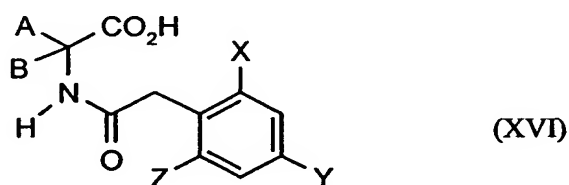
- 5 14. Compositions according to Claim 12 or 13 where the crop plant compatibility-improving compound is cloquintocet-mexyl or mefenpyr-diethyl.
15. Method for controlling unwanted vegetation, characterized in that a composition according to Claim 12 is allowed to react on the plants or their habitat.
16. Use of a composition according to Claim 12 for controlling unwanted vegetation.
- 10 17. Compounds of the formula (II)



in which

A, B, X, Y, Z and R<sup>8</sup> are as defined above.

18. Compounds of the formula (XVI)



in which

A, B, X, Y and Z are as defined above.

19. 2-Chloro-4-methyl-6-ethylphenylacetic acid, methyl 2-chloro-4-methyl-6-phenylacetate,  
1'-(2-chloro-4-methyl-6-ethylphenyl)-2',2',2'-trichloroethane and 2-chloro-6-ethyl-4-  
5 methylaniline.